



Indiana Department of Environmental Management
Office of Water Quality
Wetlands Section

Publication Date:
October 29, 2010

IDEM ID Number:
2010-468-40-JWR-A

Closing Date:
November 18, 2010

Corps of Engineers ID Number:
Not Available

PUBLIC NOTICE

To all interested parties:

This letter shall serve as a formal notice of the receipt of an application for **Section 401 Water Quality Certification** by the Indiana Department of Environmental Management (IDEM). The purpose of the notice is to inform the public of active applications submitted for water quality certification under Section 401 of the Clean Water Act (33 U.S.C. § 1341) and to solicit comments and information on any impacts to water quality related to the proposed project. IDEM will evaluate whether the project complies with Indiana's water quality standards as set forth at 327 IAC 2.

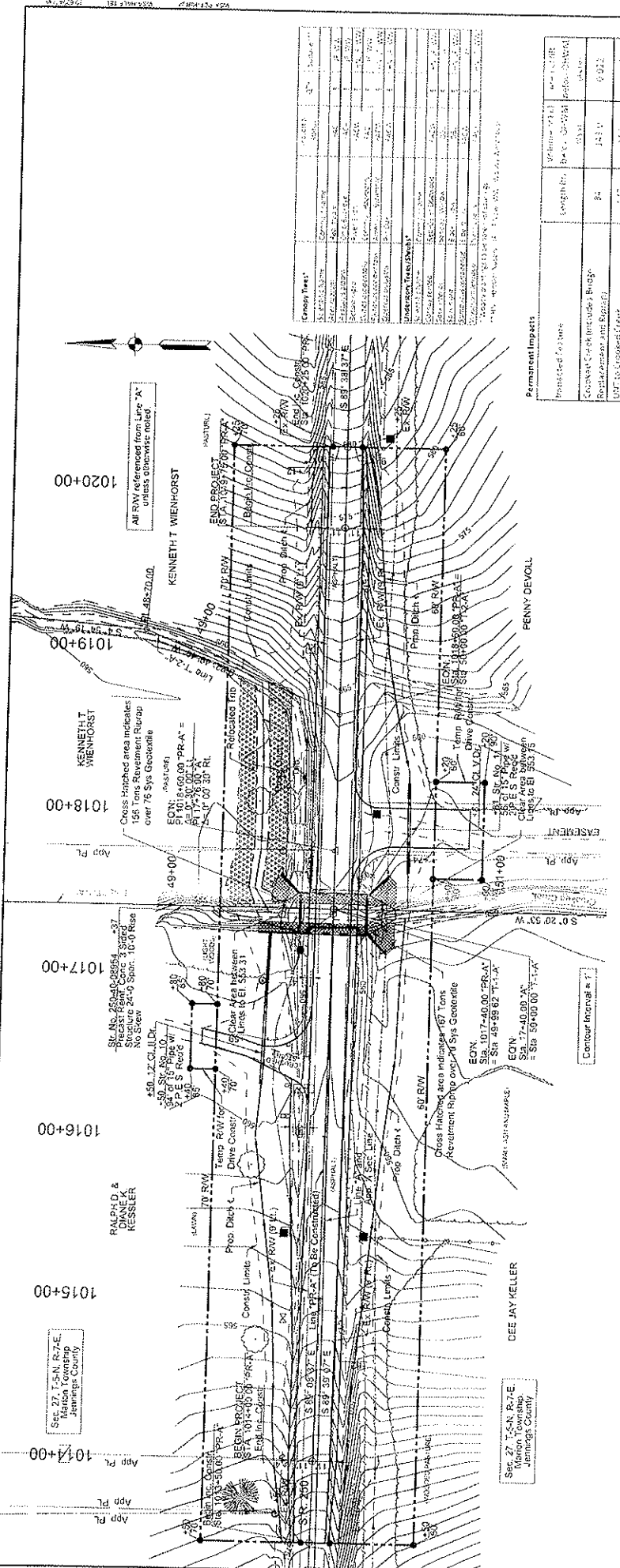
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|----------------------|---|------------------|--|
| 1. Applicant: | Mr. Nathan Saxe
Indiana Department of Transportation
100 N Senate Avenue, Room N642
Indianapolis, IN 46204 | 2. Agent: | Ms. Janette Fulkerson
Wilbur Smith Associates
429 N Pennsylvania Street, Suite 102
Indianapolis, IN 46204 |
|----------------------|---|------------------|--|
- 3. Project location:** NW ¼, Section 27, Township 5 North, Range 7 East, Jennings County, Deputy USGS Quad Map. The project is located on SR 250 approximately 5 miles east of I-65 exit 41.
- 4. Affected waterbody:** Crooked Creek and Unnamed tributary to Crooked Creek
- 5. Project Description:** The applicant proposes to replace the existing structure over Crooked Creek with a new 24-foot span by 10-foot rise 3-sided box structure 42 feet in length. The new structure will require the discharge of riprap for scour protection along 76 linear feet of stream channel. The project will also expand the existing road way embankment requiring the relocation of 147 linear feet of an unnamed tributary to Crooked Creek. As compensatory mitigation for the stream relocation, the applicant will reconstruct 151 linear feet of stream channel using the two stage design. The new floodplain shelf will be planted with native herbaceous vegetation and trees and shrubs. Temporary impacts associated with the project include the use of a temporary cofferdam to dewater the construction site and the use of a temporary stream crossing to allow access. To view additional information about the project please visit the following webpage address: <http://www.in.gov/idem/6394.htm>.

Comment period: Any person or entity who wishes to submit comments or information relevant to the aforementioned project may do so by the closing date noted above. Only comments or information related to water quality or potential impacts of the project on water quality can be considered by IDEM in the water quality certification review process.

Public Hearing: Any person may submit a written request that a public hearing be held to consider issues related to water quality in connection with the project detailed in this notice. The request for a hearing should be submitted within the comment period to be considered timely. The request should also state the reason for the public hearing as specifically as possible to assist IDEM in determining whether a public hearing is warranted.

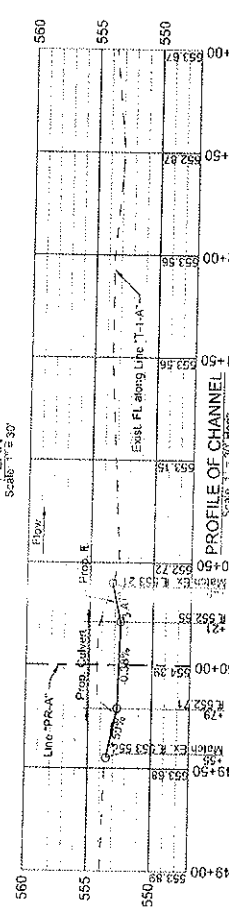
Questions? Additional information may be obtained from Mr. Jason Randolph, Project Manager, at 317-233-0467. Please address all correspondence to the project manager and reference the IDEM project identification number listed on this notice. Indicate if you wish to receive a copy of IDEM's final decision. Written comments and inquiries may be forwarded to -





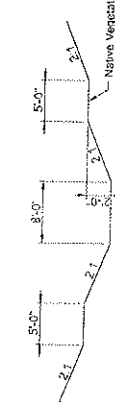
Mitigation Area: Shall be Seeded with 15 lb Seed Mixture, Grass 1 (A = 0.07 acres)

PLAN
Scale 1" = 30'



PROFILE OF CHANNEL
Scale 1" = 20' Horiz
1" = 5' Vert

TYPICAL SECTION THRU STRUCTURE
See Profile of Channel
Not to Scale



TYPICAL TWO-STAGE SECTION THRU RELOCATED TRIBUTARY
Not to Scale

Permanent Impacts

Project Feature	Length (ft)	Volume (cu yd)	Area (sq ft)
Grassland	34	14.3	0.022
Barren Land	147	14.7	0.025
Total Permanent Impacts	231	147.9	0.057

Temporary Impacts

Project Feature	Length (ft)	Volume (cu yd)	Area (sq ft)
Grassland	12	12	0.013
Barren Land	21	21	0.013
Total Temporary Impacts	21	20	0.013

PRECAST REINFORCED CONCRETE THREE SIDED STRUCTURE

Notes:
1. See Sheet 6 for Reference Points, Bench Mark Data, Pct. Drive Data, and Additional Alignment Information.
2. 24' x 30' (SPAN X 10'-0" RISE)
3. 0' SKEW, 30'-0" CLEAR ROADWAY
4. 5' HIGH, 10' WIDE, 10' DEEP
5. JENNINGS COUNTY, INDIANA

WilburSmith
ASSOCIATES

420 N. Franklin St., Ste. 100
Indianapolis, IN 46202
P 317.625.2250 F 317.627.1133
www.wilbur-smith.com

RECOMMENDED FOR APPROVAL
DESIGNER
CHECKED
DATE

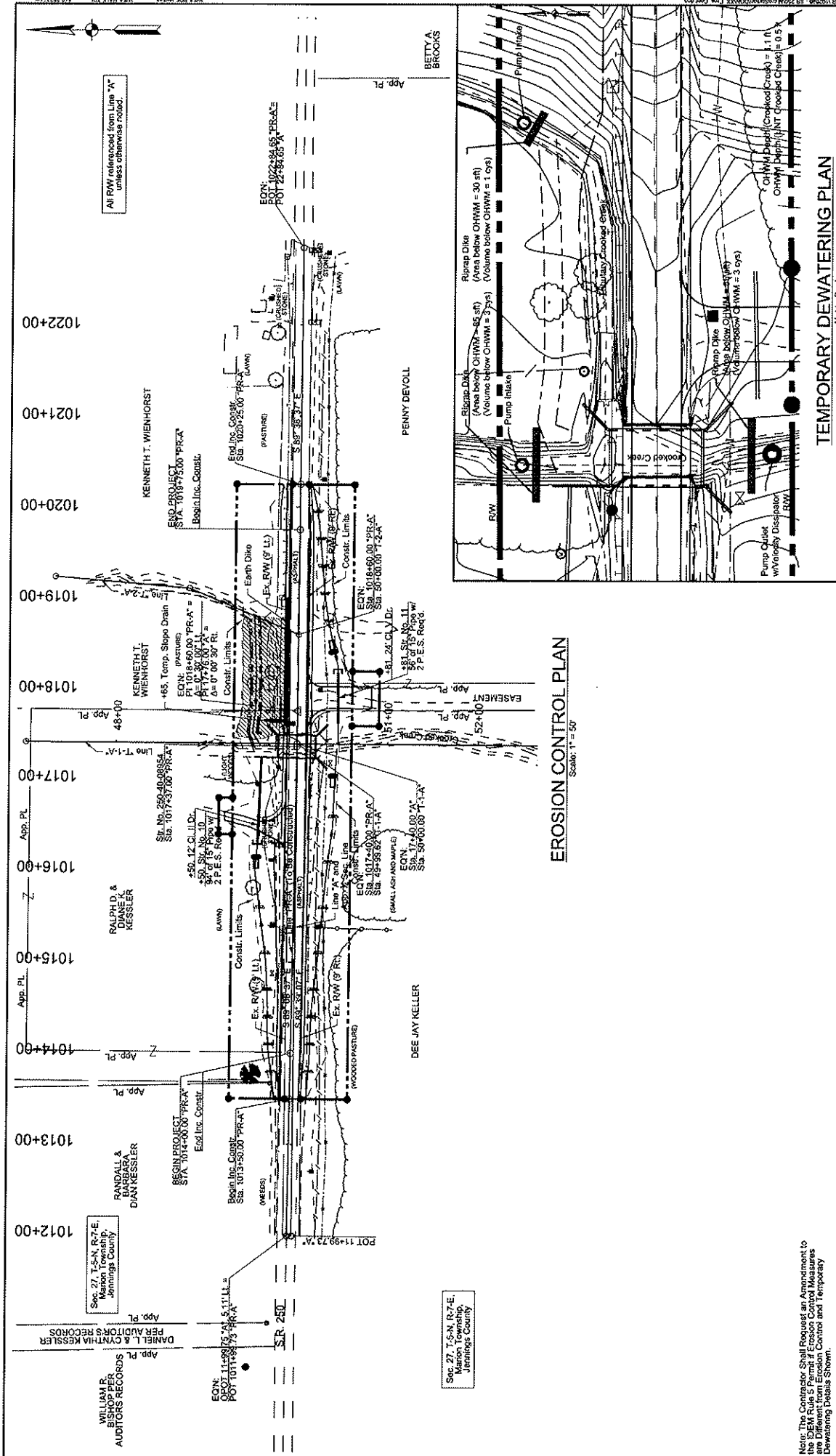
DESIGNED BY
CHECKED BY
DATE

INDIANA
DEPARTMENT OF TRANSPORTATION

WATERWAY CLEARING LAYOUT
S.R. 250

HORIZONTAL SCALE
AS NOTED
VERTICAL SCALE
AS NOTED
SURVEY BODY
DATE
SHEET NO.
PROJECT NO.

BRIDGE FILE
250-00000
DESIGNATION
000000
SHEET NO.
PROJECT NO.



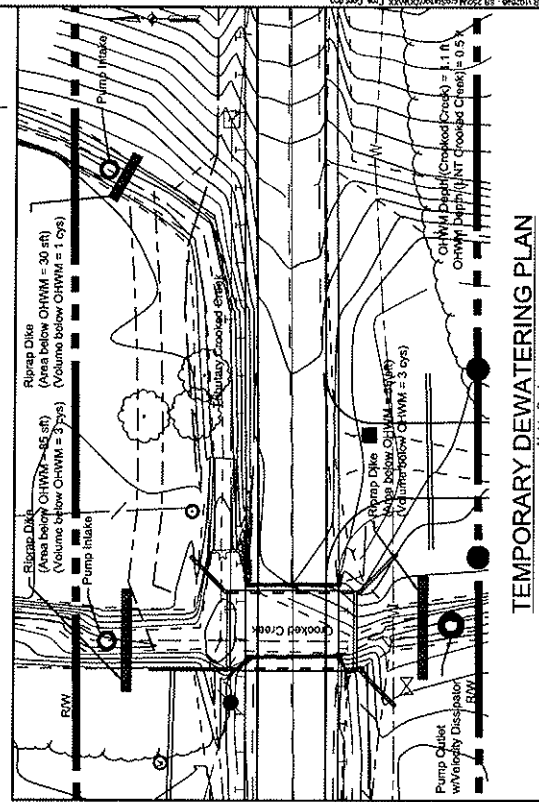
EROSION CONTROL PLAN
Scale: 1" = 50'

Sect. 27, T-5-N, R-7-E,
Marion Township,
Jennings County

Sect. 27, T-5-N, R-7-E,
Marion Township,
Jennings County

All R/W referenced from Line "A"
unless otherwise noted.

Note: The Contractor shall Request an Amendment to the I.D.E.W. R/W if the Erosion Control and Temporary Dewatering Details Shown.



TEMPORARY DEWATERING PLAN
North Scale






<div>LEGEND</div> <div><div> Pipe Inlet Protection</div><div> Perimeter Protection</div><div> Riprap Dike Protection</div></div>		<div> Sediment Trap</div> <div> Erosion Control Blanket (2:1 Slopesides)</div>	<div>WilburSmith A S S O C I A T E S</div> <div>428 N. Pennsylvania St., Suite 102 Indianapolis, Indiana 46204 P-317.822.5258 F-317.822.5273 www.WilburSmith.com</div>	<div>RECOMMENDED FOR APPROVAL</div> <div>DESIGNED: JMC</div> <div>CHECKED: JMC</div> <div>DESIGN ENGINEER</div> <div>DRAWN: JMC</div> <div>CHECKED: JMC</div> <div>DATE</div>	<div>INDIANA</div> <div>DEPARTMENT OF TRANSPORTATION</div> <div>EROSION CONTROL PLAN</div> <div>S.R. 250 - LINE "A"</div>	<div>HORIZONTAL SCALE</div> <div>AS SHOWN</div> <div>VERTICAL SCALE</div> <div>1" = 10'</div> <div>SURVEY BOOK</div> <div>7</div> <div>SHEETS</div> <div>9</div> <div>CONTRACT</div> <div>B-29702</div> <div>PROJECT</div> <div>940302</div> <div>DRAWING NO.</div> <div>ED000011</div> <div>BRIDGE FILE</div>
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Figure 3. Portion of the Jennings County soil map (USDA, NRCS 2008) showing the SR 250 Bridge Replacement project area.

**Attachment D:
Mitigation Plan
SR 250 Bridge Replacement Project over Crooked Creek
Marion Township, Jennings County, Indiana
Des. No. 0200011**

Baseline Information

The intent of the proposed project is to replace the existing SR 250 Bridge over Crooked Creek in order to improve the operation of the site by providing standard design features. The existing structure is constructed on timber piles, which are decaying and in this case have resulted in the settling of the approach roadway. It is INDOT's policy and desire to replace this type of sub-structure when appropriate.

Unavoidable impacts resulting from the proposed SR 250 over Crooked Creek Bridge Replacement project include the replacement of the existing structure and the installation of erosion/scour protection. In addition, approximately 147 feet of the UNT to Crooked Creek will be relocated approximately 40 feet north of its existing alignment in order to expand the SR 250 roadway embankment to provide the required minimal clear roadway width. The length of the relocated channel of the UNT to Crooked Creek is approximately 151 feet, which equates to a mitigation ratio of just over 1:1.

Crooked Creek is designated as Stream 1 in the Waters of the US Report for the project (Attachment B of the Application). This stream attained a provisional QHEI score of 54.25, which equates to a narrative rating of between fair and good in Ohio EPA's *Methods for Assessing Habitat in Flowing Waters: Using the Qualitative Habitat Index (QHEI)*. Stream 2 is an UNT to Crooked Creek. Stream 2 attained a provisional HHEI score of 21, which equates to a Modified Class I stream in Ohio EPA's *Field Evaluation Manual for Ohio's Primary Habitat Streams*. The completed QHEI and HHEI data forms for these streams are included in Attachment C of the Permit Application.

Goals and Objectives

The goal of the proposed stream mitigation project is to offset the unavoidable impacts to Crooked Creek and the UNT to Crooked Creek that will occur as a result of the SR 250 bridge replacement project. The relocated channel was developed using a 2-stage channel design which includes natural stream features incorporated into the relocated channel. These natural stream features include a benched low flow channel which allows for the controlled meandering of the low flow channel within the larger relocated channel. In addition these benches will be sewn with a native riparian seed mix and planted with trees and shrubs native to southeast Indiana. The native riparian seed mix will consist of at least 10 native species and the woody vegetation will consist of a minimum of five native hardwood canopy trees and five native understory trees/shrubs.

See the attached details for native riparian seed mix descriptions, recommended tree species, and quantities.

Site Selection

The proposed mitigation will be onsite and has been incorporated into the design of the bridge replacement project. On-site mitigation will replace those functions and values lost as a result of the project and will also serve as an enhancement to the unimpacted portions of the stream channel and their associated riparian corridors. The proposed SR 250 Bridge Replacement Project is located in the Muscatatuck-Fower/Slate/Crooked Creek Watershed (HUC 05120207030030).

Planting and Seeding

The proposed mitigation site will be seeded with the Midwestern Riparian Seed Mix (See attached seed mix specifications) or an INDOT approved equal. Seeding and site preparation will be in accordance with INDOT Specification Section 621. The riparian seed mixture will be sown prior to the installation of the erosion-control blanket.

Planting of bare root saplings/seedlings will be done in accordance with INDOT Specification Section 622. If bare root saplings are placed into the erosion control blanket then the contractor will ensure that they are placed in a manner that minimizes disturbance of the erosion control blanket.

Bare root saplings/seedlings will be randomly planted on 10- to 12-ft centers within the area specified on the attached mitigation plan. Shrubs will be placed randomly between the trees. Avoid planting in a grid in order to mimic natural vegetation patterns.

The contractor will provide a warranty on all native seeding and planting done in accordance with the mitigation plan for a period of 2-years.

See attached Mitigation Seeding and Planting Plan for additional details.

Midwestern Riparian Seed Mix (WS2)*

Grasses and Sedges	
Scientific Name	Common Name
<i>Carex frankii</i>	Frank's Sedge
<i>Carex muskingumensis</i>	Palm Sedge
<i>Carex normalis</i>	Spreading Oval Sedge
<i>Carex squarrosa</i>	Squarrose Sedge
<i>Carex vulpinoidea</i>	Fox Sedge
<i>Cinna arundinacea</i>	Common Wood Reed
<i>Elymus canadensis</i>	Canada Wild Rye
<i>Elymus riparius</i>	Riverbank Wild Rye
<i>Elymus virginicus</i>	Virginia Wild Rye
<i>Glyceria striata</i>	Fowl Manna Grass
<i>Leersia oryzoides</i>	Rice Cut Grass
<i>Panicum virgatum</i>	Switch Grass
<i>Scirpus atrovirens</i>	Dark Green Bulrush
<i>Scirpus pendulus</i>	Drooping Bulrush
Forbs	
<i>Aster novae-angliae</i>	New England Aster
<i>Bidens cernua</i>	Nodding Bur Marigold
<i>Eupatorium purpureum</i>	Purple Joe Pye Weed
<i>Eupatorium rugosum</i>	White Snakeroot
<i>Heliopsis helianthoides</i>	False Sunflower
<i>Lysimachia ciliata</i>	Fringed Loosestrife
<i>Rudbeckia laciniata</i>	Green-headed Coneflower
<i>Rudbeckia triloba</i>	Brown-eyed Susan
<i>Silphium perfoliatum</i>	Cup Plant
<i>Verbesina alternifolia</i>	Wingstem
<i>Vernonia gigantea</i>	Tall Ironweed
Temp Cover	
<i>Agrostis alba</i>	Redtop
<i>Agrostis alba palustris</i>	Creeping Bent Grass
<i>Avena sativa</i>	Seed Oats
<i>Lolium multiflorum</i>	Annual Rye Grass

*Available from Heartland Restoration Services

Suggested Tree and Shrub Plantings

Canopy Trees*		Indicator Status	QTY	Supplier**
Scientific Name	Common name			
<i>Acer rubrum</i>	Red maple	FAC	5	JF, WW
<i>Aesculus glabra</i>	Ohio Buckeye	FAC+	5	JF, WW
<i>Betula nigra</i>	River Birch	FACW	5	HN, JF, WW
<i>Celtis occidentalis</i>	Common Hackberry	FAC-	5	JF, WW
<i>Platanus occidentalis</i>	American Sycamore	FACW	5	HN, JF, WW
<i>Quercus palustris</i>	Pin Oak	FACW	5	HN, JF, WW
Understory Trees/Shrubs*				
Scientific Name	Common name			
<i>Cornus sericea</i>	Red-Osier Dogwood	FACW	5	HN, JF, WW
<i>Salix interior</i>	Sandbar Willow	OBL	5	JF
<i>Salix nigra</i>	Black willow	OBL	5	HN, JF, WW
<i>Sambucus canadensis</i>	Elderberry	FACW-	5	JF
<i>Viburnum lentago</i>	Nannyberry	FAC+	5	HN, JF, WW

* Woody plantings to be bare root saplings

** HN - Hensler Nursery, JF - JF New, WW - Woody Warehouse

Contact Information for Native Seed Mix and Woody Vegetation Suppliers

Heartland Restoration Services, Inc.

14921 Hand Road
Fort Wayne, IN 46818-9540
Phone: (260) 489-8511
Fax: (260) 489-8607
Email: mail@earthsourceinc.net
Web: <http://www.earthsourceinc.net/index.html>

Hensler Nursery, Inc.

5715N 750E
P.O. Box 58
Hamlet, Indiana 46532
Phone: (574) 867-4192
Fax: (574) 867-4960
Email: info@henslernurseryindiana.com
Web: <http://www.henslernurseryindiana.com>

JF New

708 Roosevelt Road
Walkerton, Indiana 46574
Phone: (574) 586-3400
Fax: (574) 586-3446
Email: info@jfnnew.com
Web: <http://www.jfnnew.com>

Woody Warehouse Nursery

P.O. Box 259 • 3216 W. 850 N.
Lizton, IN 46149
Phone: (866) 766-8367 or (317) 994-5487
Fax: (317) 994-5494
Email: sales@woodywarehouse.com
Web: <http://www.woodywarehouse.com/index.html>